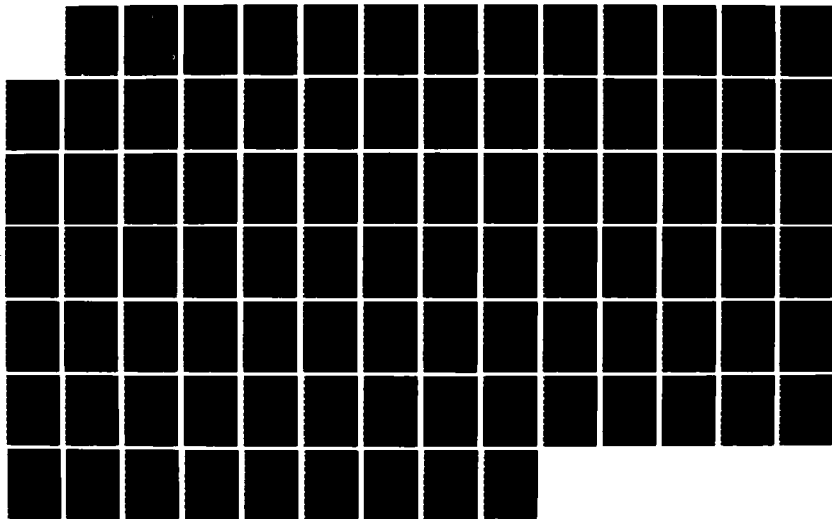
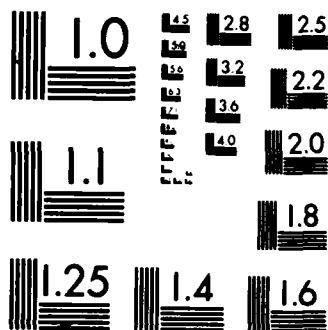


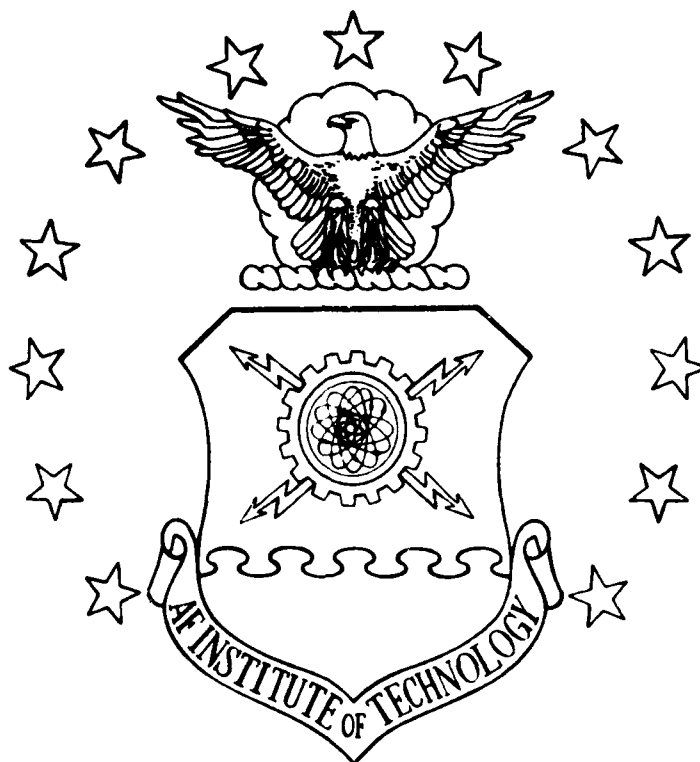
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AN ANALYSIS OF MILITARY AIRLIFT COMMAND  
PILOT ATTITUDES AND PERCEPTIONS TOWARDS  
AIR TRAINING COMMAND  
INSTRUCTOR PILOT ASSIGNMENTS

THESIS

Jeffrey A. Porter  
Captain, USAF

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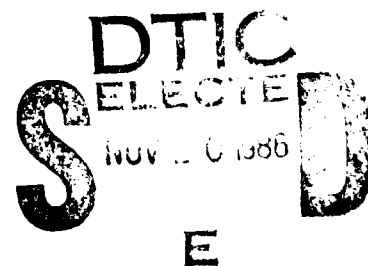
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AN ANALYSIS OF MILITARY AIRLIFT COMMAND  
PILOT ATTITUDES AND PERCEPTIONS TOWARDS  
AIR TRAINING COMMAND INSTRUCTOR PILOT ASSIGNMENTS

THESIS

Presented to the Faculty of the School of Systems and Logistics  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Logistics Management

Jeffrey A. Porter, B.A.

Captain, USAF

September 1986

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Abstract

This investigation measured the attitudes and perception that Military Airlift Command (MAC) pilots have towards Air Training Command (ATC) Instructor Pilot assignments. Three pilot groups were examined: those MAC pilots vulnerable for an ATC assignment, those currently serving in ATC and those MAC pilots who have completed an ATC assignment. The perceived effect of an ATC assignment on career potential was measured for these three groups and a comparison was made between groups. A historical data analysis was done to examine career differences between two pilot groups: MAC pilots who have had an ATC assignment and those who have not.

The analysis of pilot attitudes and perceptions was accomplished by use of a census survey of MAC pilots. The analysis of career differences was accomplished using historical data provided from the Military Personnel Center (MPC). The results reflect the perception by all three pilot groups that an ATC assignment decreases their chances for promotion and career advancement. For those pilots vulnerable for an ATC assignment and those currently serving in ATC, this attitude is strongly related to their decision to separate from, or remain in, the Air Force. The

historical data analysis revealed evidence that those MAC pilots who have had ATC assignments have not done as well in their careers as their contemporaries who remained in MAC.

AN ANALYSIS OF MILITARY AIRLIFT COMMAND  
PILOT ATTITUDES AND PERCEPTIONS TOWARDS  
AIR TRAINING COMMAND INSTRUCTOR PILOT ASSIGNMENTS

I. Introduction

General Issue

Military Airlift Command (MAC) faces an ongoing problem selecting qualified pilots to meet Air Training Command (ATC) Instructor Pilot requirements. Currently, MAC, the Strategic Air Command, and the Tactical Air Command are required to supply qualified pilots to meet the annual requirements of ATC (2). This is part of an on-going policy within ATC directed towards maintaining a balance of experience within their Instructor Pilot force and requiring that all of the Major Commands be adequately represented (2).

MAC Rated Officer Assignments personnel are currently required to supply approximately 80 pilots per year to fulfill this requirement (6). The qualifications required of those pilots continues to change. MAC is required, by regulation, to assign pilots to ATC who are qualified as Aircraft Commanders (AC's) or higher (2:45). This benefits ATC since they are receiving more experienced pilots and these pilots can be quickly regualified if they return to MAC. It has not always been possible, however, to do this

for practical reasons. If MAC were to assign only AC's, the experience level within MAC would be decreased. As a result, MAC has had an ongoing policy with ATC to provide approximately 50% AC's and 50% Co-Pilots or First Pilots (6). Because of declining experience levels experienced by MAC in 1984 even this wasn't possible and MAC assigned virtually all Co-Pilots and First Pilots (6). During the current year MAC has again tried to maintain a 50/50 balance between AC's and Co-Pilots/First Pilots.

It is difficult to find qualified, motivated individuals to volunteer for these assignments (6). Personnel officials believe this is due to a negative perception by young MAC pilots towards ATC assignments. MAC believes many of its young officers view an ATC assignment as a detriment to their career and promotion potential (7). They also believe a perception exists by MAC pilots that they will be more disadvantaged than their contemporaries who remain in MAC when they return from completing an ATC assignment (13).

#### Problem Statement

The fundamental problem is the degree to which this negative attitude towards ATC assignments exists. Captain Martinez, Chief, Officer Retention for MAC stated,

ATC assignments have always been a topic met with anxiety and speculation. I feel that, in many cases, that is due to lack of information/understanding more than realities. A perception exists that an ATC assignment, for a MAC pilot, is a less than desirable career move. Regardless if that's right or wrong, the

perception itself makes it a concern that needs to be addressed (9).

If this attitude is prevalent, then the ability to encourage qualified and motivated individuals to volunteer for these assignments will be limited. Measuring these attitudes is the first step in trying to improve the ATC assignment process.

The purpose of this research was to measure the attitudes of MAC pilots towards assignments to ATC by measuring the "perceived" effect of ATC on career opportunities and promotion potential. Also, a comparison of the attitudes between three pilot groups was made. The analysis of historical data investigated promotion rates between MAC pilots who have completed ATC assignments and those who have not.

#### Importance of This Research

The results of this research are important to MAC assignment personnel. It shows the attitude of those officers currently vulnerable for ATC towards an ATC assignment. It is the first step in determining if there are changes needed in the assignment process.

Surveying the attitudes of MAC pilots currently assigned to ATC is extremely valuable. Unlike those pilots who have the potential to go to ATC, they have experienced, first hand, the opportunities available in ATC and seen the potential for career advancement. They have also had the opportunity to observe the type of assignments other MAC

pilots have received following their ATC assignment. This group contains those pilots who will remain in the Air Force along with those who will elect to separate, for whatever reason, from the Air Force following their assignment to ATC. For these reasons, their attitudes are based on first hand knowledge and hopefully provide a good indication of the current perception of ATC assignments by MAC pilots. This information is of value to both MAC and ATC in determining if changes need to be made in the assignment process, opportunities available to MAC pilots assigned to ATC, or how MAC pilots are utilized following their ATC assignment.

The analysis of MAC pilots who have completed an ATC assignment is valuable but has limitations. These pilots will provide a different perspective on their ATC assignment since they have gone on to other assignments and have formed opinions as to how ATC affected their careers. This group, unfortunately does not contain those pilots who separated from the Air Force following their ATC assignment and therefore may not portray a totally accurate picture of these perceptions.

The research results will aid MAC in determining if they need to thoroughly examine how those pilots who have completed ATC assignments are utilized. If these individuals do perceive ATC as having a negative effect on their careers then MAC can more closely examine the basis of these perceptions. If there is no prevalent negative attitude,

then these findings would support current assignment practices and could be used to dispell the notion of an overriding negative attitude towards ATC assignments by MAC pilots.

### Tasks

There are two major tasks which were required to complete this research. The first was to survey three groups of MAC pilots: those who are vulnerable for an ATC assignment, pilots currently serving in ATC and those who have completed an ATC assignment. The second task was to examine career differences between MAC pilots who have had an ATC assignment and those pilots who did not.

### Limitations on the Scope of the Study

Certain pilot groups within MAC were not studied. The research was directed to MAC pilots who are, or were, qualified in one of MACs' Major Weapon Systems: C-5, C-141 or the C-130 aircraft. This is a result of the career differences between these individuals and pilots who fly support airlift aircraft such as the C-9 and C-21 (6). The survey was given to pilot groups who met the following criteria:

Group One: Contains MAC pilots who are in their initial assignment following pilot training and flying either the C-5, C-141 or C-130. They must have an active duty service date of 1 January 1981 or later.

Group Two: Contains MAC pilots whose initial assignment following pilot training was in the C-5, C-141 or C-130 and who are currently serving as Instructor Pilots in ATC. They must have an active duty service date no earlier than 1 January 1977.

Group Three: Contains pilots whose initial assignment following pilot training was in either the C-5, C-141 or C-130 and have subsequently completed an Instructor Pilot assignment in ATC. They must have an active duty service date of 1 January 1974 or later.

Specifying a cut-off for the active duty service date eliminated those pilots with extensive active duty service prior to going to Undergraduate Pilot Training. In all three groups, a census was taken to eliminate sampling error. Group Three was limited to pilots who are in their first assignment following ATC.

Limitations were placed on the scope of the analysis of career differences between MAC pilots who have had ATC assignments and those who have not. The analysis focused primarily on the percentage of officers in each grade for each year group analyzed. There was no attempt to explain the cause of any difference in careers such as promotion rates.

#### Hypotheses and Investigative Questions

The following null ( $H_0$ ) and alternative ( $H_a$ ) hypotheses, and investigative questions, are examined by this research:

Hypotheses.

1.  $H_0$ : There is no difference in the perceived effect an ATC assignment has on promotion and career advancement between MAC pilots who have the potential to go to ATC, MAC pilots currently in ATC and MAC pilots who have completed ATC assignments.

$H_a$ : There is a difference in the perceived effect an ATC assignment has on promotion and career advancement between MAC pilot who have the potential to go to ATC, MAC pilots currently in ATC and MAC pilots who have completed ATC assignments.

2.  $H_0$ : For MAC pilots currently vulnerable for ATC assignments, the decision to separate from the Air Force if selected for ATC and their perception of how ATC would affect their chances for promotion and career advancement are independent.

$H_a$ : For MAC pilots currently vulnerable for ATC assignments, the decision to separate from the Air Force if selected for ATC and their perception of how ATC would affect their chances for promotion and career advancement are dependent.

3.  $H_0$ : For MAC pilots currently assigned to ATC, the

decision to separate from, or remain in, the Air Force and their perception of how ATC has affected their chances for promotion and career advancement are independent.

$H_a$ : For MAC pilots currently assigned to ATC, the decision to separate from, or remain in, the Air Force and their perception of how ATC has affected their chances for promotion and career advancement are dependent.

4.  $H_o$ : For MAC pilots who have completed ATC assignments, the decision to separate from, or remain in, the Air Force and their perception of how ATC affected has their chances for promotion and career advancement are independent.

$H_a$ : For MAC pilots who have completed ATC assignments, the decision to separate from, or remain in, the Air Force and their perception of how ATC affected has their chances for promotion and career advancement are dependent.

#### Investigative Questions.

1. Is the relationship between the decision to separate from, or remain in, the Air Force and the perceived effect an ATC assignment has on the chances for promotion and career advancement the

same for all three survey groups?

2. Are MAC pilots treated the same as pilots from other Major Commands during their ATC assignment? Is this perception the same for those pilots currently in ATC and those who have completed an ATC assignment?
3. What are the percentages of MAC pilots promoted to each pay grade in the following groups: Those who have had ATC assignments and those who have not?

#### Discussion and Literature Review

This research effort grew out of a request from HQ MAC Rated Officer Assignment Division (DPROA). There has been no previous attempt to formally study these pilot groups. An initial investigation, involving interviews and a review of available documentation, indicated assignment and retention personnel in both MAC and ATC believe MAC pilots regard ATC assignments as having a negative impact on their career. What is not known is how pervasive this attitude is among MAC pilots. Certainly, some percentage of pilots feel an ATC assignment will negatively impact their career but the degree to which this attitude exists is unknown.

Major Larry Harris, Chief DPROA, has worked rated officer assignments for three years and believes that a negative attitude by MAC pilots toward ATC does exist to some extent (6). He is in constant contact with pilots and commanders and finds he is continually combating this per-

ception (6). The problem was also recognized by personnel at HQ ATC in a recent letter from the ATC Director of Personnel (DP), to the MAC DP (13). Colonel Roberson addressed several issues concerning MAC pilots currently in ATC. A large percentage of the pilots in ATC, the majority of which are from the other Major Commands, separate at the end of their ATC tour (13). He felt one of the major reasons MAC pilots separate from the Air Force is the

perception that their ATC assignment takes them out of mainstream MAC and makes them less competitive than their contemporaries who remain in MAC (13).

He believes MAC and ATC should cooperate and make the effort to specifically identify this problem and take steps to correct it.

MAC retention personnel are concerned that ATC assignments are causing pilots to separate from the Air Force. Captain Randy Martinez, Chief Officer Retention, HQ MAC, has been given the task of determining what reasons underlie recent decreased retention levels for MAC pilots (8). His investigation, consisting of discussions with pilot groups, pointed to several causes, one of which is the potential for ATC assignments (8). He requested all squadron commanders to interview pilots who were separating in order to determine specific reasons for their decision. In messages to HQ MAC, squadron commanders reported numerous reasons, but a central theme was the potential for undesirable assignments, one of these being ATC Instructor Pilot tours (3,10,12). He

plans on visiting with MAC pilots at individual bases to personally discuss perceptions and attitudes towards ATC assignments (8).

This topic was discussed at a recent MAC Squadron Commander's Conference (7). Participants addressed the turbulence associated with assignments to ATC and made several recommendations, such as guaranteeing follow-on assignments to help alleviate uncertainty (7).

A survey recently administered by ATC to all Instructor Pilots, including those pilots whose parent command is MAC, investigated numerous issues including their perceptions of how their ATC assignment has affected their careers (5). The results revealed the following:

1. Thirty percent of the MAC pilots surveyed have either submitted their Date of Separation (DOS), or are inclined to separate following their ATC assignment.

2. When asked the most important reason for not returning to MAC, 36% of those surveyed felt they would be behind their contemporaries who remained in MAC.

Up to this point, there has been very little documentation regarding the attitudes of MAC pilots towards an ATC assignment and its perceived effect on their career. There is concern, however, and a desire to investigate whether or not these perceptions are real and if they have any basis in fact. Even though there has been no formal proof, there is strong evidence to suggest MAC pilots perceive an ATC as-

signment will have a negative effect on their career. While MAC is working to improve this situation, they feel it is important to determine the extent to which this perception exists and that is what this research effort is designed to accomplish.

#### Study Outline

This chapter has presented an overview of the ATC assignment process for MAC. It has shown why there is cause to believe a negative attitude exists towards ATC assignments and presented a list of hypotheses and investigative questions to be examined. Chapter II will specify the methodology to be used in this study and examine the survey instrument designed to answer the hypotheses and investigative questions. The data analysis and resultant findings will be provided in Chapter III, along with a comprehensive discussion of those results. Finally, Chapter IV will discuss the implications of those results and make recommendations concerning areas for further study.

## II. Methodology

### Justification of Research Approach

The purpose of this research was to measure the perceptions that MAC pilots have toward ATC assignments. In order to do this adequately, it was necessary to ask specific questions of the individual pilots concerned. One method would have been to travel to individual bases and randomly interview a sample of each population or phone interview those individuals. Interviewing, however, is very costly and much time is consumed through travel and administrative tasks (4:302). Because of the limitations of both time and money, it was determined that a mail survey would be the most effective means of collecting the needed data to complete the research. Also, respondents to a mail survey would be more likely to give honest responses since they are not required to provide any personal identification (4:308). This method also made it possible to survey the entire population of each survey group.

The collection of historical data was accomplished to provide evidence that showed any differences between MAC pilots who completed ATC assignments and MAC pilots who did not. The data breaks down these two categories into specific year groups starting with 1970. It provides the number of pilots in each pay grade among groups along with other information, such as staff level tours and intermediate service school completion.

### Survey Instrument

The survey instrument was designed with input from the MAC Rated Officer Assignments and Retention offices. Questions were designed to provide demographic information from the respondents, along with their opinions and attitudes concerning ATC assignments. Survey design followed the survey instrument design process outlined by Emory in Business Research Methods (4). A closed question, multiple choice format was chosen because of the large number of respondents involved in the research (4:216).

The final survey (see Appendix A) consisted of four sections and a total of 44 questions. Section I comprised the first eight questions, to be answered by all respondents. Questions 9-44 were broken into three separate sections, one section to be completed depending on which category the respondent fell into. Section II was to be completed by Group One: Those pilots who are in their initial assignment following pilot training and currently flying the C-141, C-5, or C-130 aircraft. Section III was to be completed by Group Two: Those pilots whose initial assignment following pilot training was in the C-141, C-5, or C-130 aircraft and are currently assigned to ATC as Instructor Pilots. Section IV was to be completed by Group Three: Those pilots whose initial assignment following pilot training was in the C-141, C-5, or C-130 aircraft and who have completed an assignment to ATC as Instructor Pi-

lots. All survey respondents were mailed the same survey and were required to complete two of the four sections. Respondents for the three groups were identified through the Military Personnel Center (MPC) at Randolph AFB, Texas, by accessing the Atlas Database. The criteria for establishing the three groups is found in Appendix B.

The survey questions for each group were designed to measure specific information about their attitudes towards ATC assignments and the perceived effect an ATC assignment would have on their career. There were no prior study or survey results used in the preparation of this survey instrument.

#### Demographic Analysis

An analysis of the demographic questions was completed on each group separately and it consisted of an examination of survey questions 1-8. This information was used as an initial investigation into each group to insure that the responses corresponded to the expected make-up of each group. For example, the majority of those pilots in Group One should consist of Second and First Lieutenants since the constraints of that group should only allow pilots with less than five years of active duty service. In addition, this investigation examined marital status, graduate studies and completion of Professional Military Education (PME) courses for consistency.

## Hypotheses

The major research hypotheses to be tested by this study are presented below with an in depth discussion concerning the means for testing, levels of confidence to be used and further questions to be addressed by each hypothesis. The primary purpose of this study was to investigate the attitudes of the three survey groups and the differences in attitudes between these three groups towards ATC assignments. The hypotheses which are presented below were used to provide a more concrete understanding of these attitudes and perceptions.

### Hypothesis 1:

There is no difference in the perceived effect an ATC assignment has on promotion and career potential between MAC pilots who have the potential to go to ATC, MAC pilots currently in ATC and MAC pilots who have completed ATC assignments.

The rationale for this hypothesis is that each of these three groups have been exposed to similar environments regarding ATC assignment opportunities, albeit to varying degrees. Group One's exposure is limited to the experiences of others who have either personally served as ATC Instructor Pilots or known someone who has. They also have the benefit of recently graduating from pilot training with its exposure to Instructor Pilot assignments. Group Two pilots had the same initial exposure as Group One but are currently experiencing the ATC Instructor Pilot assignment first hand. They have personal experience of what opportunities this

assignment has afforded them and their contemporaries. They have also been able to observe those assignments received by other MAC pilots who have completed their tours in ATC. Group Three has gone through the same experiences as the other groups and are now able to reflect back on how ATC affected their careers.

This hypothesis measured the perceptions of how each of these groups feel ATC assignments affect promotions and subsequent career potential. It examined the differences between these groups since each group is exposed to the effects of an ATC assignment to a progressively greater degree. The question was asked to the three survey groups: "How do you feel your chances for promotion and career advancement (would be, have been, or were) affected by your assignment to ATC?" (see Appendix A). Questions 13, 22 and 35 represent the variable which was tested by this hypothesis. A One-Way Analysis of Variance (ANOVA) was the statistical procedure used to test this hypothesis and was accomplished using a .05 level of significance. This results in a 95% confidence level for the results. A One-Way ANOVA was chosen because of its ability to compare more than two population means (1:632 ). It is a statistical test designed to measure the degree of difference between populations with some pre-chosen level of confidence. In this case, a 95% level of confidence was chosen for practical reasons. It represents a 5% chance of rejecting the null

hypothesis when, in fact, it was true (1:274). If the null hypothesis,  $H_a$ , is rejected in favor of the alternative hypothesis,  $H_o$ , then a further analysis is performed, examining whether or not a difference existed between the three pairs of groups to determine which group is significantly different from the others. In analyzing pairs of groups, a similar test called a t-test was used since it is designed to measure if there is a difference between two population means (1:298).

An examination of the responses to this question by each group was also accomplished by constructing a frequency distribution, including percentages associated with each alternative response. This information was used to more closely identify exactly how each group views the effect of ATC assignments.

#### Hypothesis 2:

For MAC pilots currently vulnerable for ATC assignments, the decision to separate from the Air Force if selected for ATC and their perception of how ATC would affect their chances for promotion and career advancement are independent.

This hypothesis is an attempt to investigate the relationship between the perceived effect an ATC assignment would have on their career and whether or not they would elect to separate from the Air Force if selected for an ATC assignment. It focused on Group One of the survey, those pilots who are currently in a position to be selected to go to ATC. This group of pilots receive the majority of their

information from other pilots rather than from first hand experience. The relationship between this decision and the perceived effect an ATC assignment would have on their career was examined in an attempt to discover if the decision to separate from the Air Force is independent or dependent of this perceived effect.

Survey questions 13 and 14 represent the variables used to test this hypothesis. When asked whether or not they would separate from the Air Force if they are selected for an ATC assignment, the pilots are told to assume they would have that option. This assumption is required as a result of the fact that most of these pilots would not have that option because of their remaining active duty service commitment (6). The responses to these two questions were cross-tabulated and a Chi-squared test was then performed using .05 level of significance to either accept or reject the null hypothesis that the two variables are independent. This statistical procedure was used because of its ability to measure the degree of disagreement between the actual data and the data expected by the null hypothesis (1:725). It is accomplished by computing the expected frequency of responses in each category and comparing it to the actual number derived from the data (1:725).

The two questions were then examined independently using the percentage of responses to each question to investigate the degree to which each was answered.

### Hypothesis 3:

For MAC pilots currently assigned to ATC, the decision to separate from, or remain in, the Air Force and their perception of how ATC has affected their chances for promotion and career advancement are independent.

The rationale for this hypothesis is the importance of examining the relationship between the ATC assignment experience and its perceived effect on careers and the decision to either separate from, or remain in, the Air Force. This investigation is intended to show the effect ATC may be having on current retention issues. This hypothesis was tested on that group of pilots currently assigned to ATC as Instructor Pilots. The majority of these pilots are or will be in the position to separate following their ATC assignment (6).

Questions 22 and 23 are used to represent the variables statistically tested by this hypothesis. The relationship of the responses to these two questions were first cross-tabulated. A Chi-squared test was then performed using a .05 level of significance to either accept the null hypothesis that the two variables are independent of each other or reject it in favor of the alternative hypothesis which states that the decision to separate from, or remain in, the Air Force is dependent on the perceived effect ATC has on their chances for promotion and career advancement. The Chi-squared statistic was again used for its ability to measure the degree to which this independence or dependence exists.

This relationship was further investigated by examining the percentage of responses to the individual questions. These are displayed as frequency diagrams representing each variable. Question 24 was examined to determine if it supports the results of Hypothesis 2. It specifically asks whether or not the assignment to ATC is a factor in the decision to either separate from, or remain in, the Air Force.

Hypothesis 4:

For MAC pilots who have completed ATC assignments, the decision to separate from, or remain in, the Air Force and their perception of how ATC affected their chances for promotion and career advancement are independent.

This is the same hypothesis as number three, only the investigation centers around the third survey group, comprised of those pilots who have completed an ATC assignment. This relationship was examined for the same reasons previously explained and involved the same statistical analysis used in Hypothesis 3. It is important, however, to note the differences between the two survey groups. First, Group Three has a broader perspective which includes their own experiences in ATC and the immediate effect the assignment had on their individual career. This data is limited, however, due to the fact that those pilots who were their contemporaries, and elected to separate from the Air Force, are not represented. This limitation will be addressed further but it is important to note that those pilots surveyed are the ones who have returned to MAC, or gone on to

other assignments, and are recounting their experiences and influencing those pilots currently in a position to go to ATC. As in Hypothesis 3 the following question will be examined to see if it supports the results of Hypothesis 4: "Will your assignment to ATC be a factor in your decision to separate or stay in the Air Force?" (see Appendix A).

#### Investigative Questions

The major research questions to be addressed by this study are presented below with a discussion concerning the variable used to answer each question. As in the testing of specific hypotheses, the primary purpose of these questions is to investigate the attitudes of the three survey groups towards ATC assignments and any differences in attitudes between these groups. The investigative questions presented below provide a greater knowledge of the attitudes and perceptions of MAC pilots towards ATC assignments.

##### Investigative Question 1:

Is the relationship between the decision to separate from, or remain in, the Air Force and the perceived effect an ATC assignment has on the chances for promotion and career advancement the same for all three survey groups?

This question centers around the results of Hypotheses 2, 3 and 4. It examines those results and compares them between groups to determine if they are constant between the groups. The results of those comparisons are discussed and the reasons for any similarities or differences between the groups explored. No statistical tests were performed in

this analysis and discussions are supported by responses to similar questions between groups.

Investigative Question 2:

Are MAC pilots treated the same as pilots from other Major Commands during their ATC assignment? Is this perception the same for those pilots currently in ATC and those who have completed an ATC assignment?

This question is an attempt to discover any reasons for either a positive or negative attitude towards ATC assignments. A discussion of the responses to survey questions 27 and 43 is the basis for this analysis. A frequency distribution of the responses to these questions is used for the purpose of answering the first part of this question.

Part two of this question is addressed to discover if there is any difference between Groups Two and Three in their perception of how MAC pilots are treated in ATC relative to other pilots. This was accomplished by testing the following hypothesis:

- $H_o$ : There is no difference between MAC pilots currently assigned to ATC and MAC pilots who have completed ATC assignments in their perceived treatment of MAC pilots relative to other pilots assigned to ATC.
- $H_a$ : There is a difference between MAC pilots currently assigned to ATC and MAC pilots who have completed ATC assignments in their perceived treatment of MAC pilots relative to other pilots assigned ATC.

Questions 27 and 43 represent the variables tested by this hypothesis. A statistical analysis was performed using a t-test, to either accept or reject the null hypothesis. A .05 level of significance was used to yield a 95% confidence

level in the results. As in the ANOVA, the t-test is a statistical procedure for analyzing and measuring the difference between two population means. A 95% level of confidence was used for consistency with the rest of the research.

Investigative Question 3:

What are the percentages of MAC pilots promoted to each pay grade in the following groups: Those who have had ATC assignments and those who have not?

Up to this point, the research has focused on measuring perceptions and attitudes towards ATC assignments by MAC pilots. The results of the preceding hypotheses and investigative questions examines what those attitudes are, the degree to which they exist, and any differences in attitude between the three groups of pilots surveyed. This section of the analysis is designed to investigate any possible causes for these attitudes, whatever they may be. This was accomplished by examining historical data to investigate any possible career differences between those MAC pilots who have had ATC assignments and those who have not. Initially, it was hoped that actual promotion rates for these two groups could be examined to study the differences. Unfortunately, due to current regulations, this was not possible. The information which was used to investigate these two groups consists of the following data:

Population:

Pilots currently in MAC with C-5, C-141, or C-130 as their Major Weapon System in the grades of Captain through Lt Colonel with Total Active Federal Commissioned Service (TAFCS) dates between 1970 and 1980.

Year Groups:

1. Pilots in the 1970-1973 TAFCS year group.
2. Pilots in the 1974-1977 TAFCS year group.
3. Pilots in the 1978-1980 TAFCS year group.

Pilot Groups:

1. Pilots who started their flying careers in MAC, then went to ATC as Instructor Pilots and are back in MAC.
2. Pilots in MAC who have not had an ATC assignment.

Within each of these year groups and broken down into both pilot groups, the following data was investigated:

1. Grade - selectees to O4 and O5 are included.
2. The number of Below the Promotion Zone selections.
3. The number of pilots deferred to the next grade.
4. The number of Major Command and Headquarters USAF tours.

This data was analyzed in an attempt to discover any trends which might impact the survey results. However, there are several limitations which need to be addressed. First, this data includes only those officers currently on active duty and therefore may not represent actual promotion rates among the two pilot groups. Also, no correlation can be drawn between promotions and any other data analyzed because individual career briefs were not used in an attempt to investigate career progressions. For example, someone may have been promoted as a result of a Headquarters USAF assignment, or the assignment may have been a result of a

subsequent promotion. Therefore, this data is of limited use in terms of statistically substantiating pilot perceptions and attitudes. It is, however, of value since those pilots represented by the data are on active duty and the source of information concerning ATC assignments for young MAC pilots.

### III. Findings and Analysis

#### Introduction

This chapter is a review of the methodology with a presentation of the resultant findings of both the hypotheses and investigative questions, based on survey responses and a breakdown of the historical data furnished by MPC. The findings are presented in the same format and order used in Chapter III, methodology, and an analysis of those findings follows the individual hypothesis or question addressed.

The surveys were sent to the survey population in April and the following response rate was used in the analysis:

Group 1 - 75.6%

Group 2 - 71.6%

Group 3 - 68.5%

The response rate to the survey by all groups was extremely high, and therefore yields a high level of confidence in the results. A complete breakdown of population size, surveys mailed and surveys returned can be found in Appendix C, along with the complete survey results, by individual question.

#### Demographic Analysis Results

An investigation of the survey results indicates that the respondents accurately represent the respective survey

TABLE I  
DEMOGRAPHIC ANALYSIS

QUESTION	GROUP 1		GROUP 2		GROUP 3	
	FREQ	PCT	FREQ	PCT	FREQ	PCT
Grade						
O-1	85	15.3	0	0.0	0	0.0
O-2	392	70.8	4	3.1	0	0.0
O-3	77	13.9	117	89.3	60	95.2
O-4/Higher	0	0.0	10	7.6	3	4.8
Age						
22-26	385	69.5	10	7.6	4	6.3
27-30	163	29.5	72	55.0	19	30.2
Over 30	5	0.9	49	37.4	40	63.5
Initial Aircraft						
C-130	282	50.9	47	35.9	22	35.5
C-141	266	49.0	76	58.0	37	59.7
C-5	4	0.7	0	0.0	3	4.8

group targeted. Table I depicts the groups by rank, age and initial aircraft assignment.

These results confirm that the population which was targeted for the survey was the one which indeed responded. As expected, Group One consists of mostly Second and First Lieutenants, whereas the majority of pilots in Groups Two and Three are Captains. The age of these individuals is consistent with their rank, and they initially flew either

the C-130, C-141 or C-5. This is consistent with the populations of the individual survey groups defined in Appendix B. For additional demographic information the reader is directed to Appendix C.

The purpose of this section of the analysis was to confirm that the responses received were, in fact, from the intended population. The examination of this data has indeed confirmed that the make-up of Groups One, Two and Three are consistent with what was expected. Therefore, the following hypotheses and investigative questions can be answered with the confidence that the correct groups were surveyed and, based on the response rate, each group was well represented.

#### Results of Hypotheses

The survey results were used to statistically analyze the following hypotheses which were discussed in Chapter II. A computer program utilizing the statistical package SPSSx, was used for all statistical calculations performed to either accept or reject the hypotheses (11). An analysis of the findings for each hypothesis was used to interpret the statistical results and further explain possible implications and reasons for these findings.

##### Hypothesis 1:

There is no difference in the perceived effect an ATC assignment has on promotion and career potential between MAC pilots who have the potential to go to ATC,

MAC pilots currently in ATC and MAC pilots who have completed ATC assignments.

This hypothesis was designed to investigate whether or not the different influences on these three groups, discussed in the methodology, were reflected in their perceptions regarding the effect an ATC assignment would have on their future career. Thus, each group was specifically asked to measure the effect which they felt ATC would have on their individual careers. The responses to this question were tabulated and a statistical comparison was made by performing a One-Way ANOVA (1:632). The results of that statistical test are presented in Table II.

The null hypothesis, that there is no difference in perception between the three groups, was tested using a .05

TABLE II  
HYPOTHESIS 1 - ANALYSIS OF VARIANCE

VARIANCE	SUM OF SQUARES	DEGREES FREEDOM	MEAN SQUARES	F RATIO	F PROB
Between Groups	26.32	2	13.16	12.16	.0000
Within Groups	804.87	744	1.08		
Total	831.18	746			

level of significance. Based on the degrees of freedom represented between and within the groups, an F-Ratio of 3.00 or less would result in acceptance of this hypothesis (1:888). Since the F-Ratio is 12.16, this hypothesis is rejected in favor of the alternative hypothesis which states that there is a difference in the perceived effect an ATC assignment has on promotion and career advancement between the three pilot groups surveyed. Examination of the F-Probability associated with this test in Table II reveals the actual level of significance of the results. A 0.00 probability means that there is close to a 100% level of confidence in the decision to reject Hypothesis 1. The degree of difference between the groups is represented by the size of the F-Ratio. Large values of this F statistic indicate that the differences among the means are large, and therefore support the alternative hypothesis that the survey groups differ (1:635).

Since there is a difference between the groups in their perception of how an ATC assignment affects careers, a t-test was performed to test the hypothesis that there is no difference in this same perception between the three pairs of groups. The results of that statistical analysis are presented in Table III.

Again, using a .05 level of significance and the degrees of freedom for each pair, a t-value of 1.960 or less is needed to accept the hypothesis that there is no differ-

TABLE III  
HYPOTHESIS 1 - T-TEST RESULTS

GROUP PAIRS	STANDARD ERROR	T VALUE	DEGREES FREEDOM	T PROB
One and Two	0.1215	2.246	162.4	0.026
One and Three	0.1641	3.762	69.9	0.000
Two and Three	0.1964	1.754	126.9	0.082

ence between each pair of groups in their perception of an ATC assignment's effect on career potential (1:887).

Examining the t-values for each pair of groups reveals that this hypothesis is rejected for Groups One and Two and Groups One and Three. The hypothesis is accepted, however for Groups Two and Three. Therefore, there is a significant statistical difference between Groups One and Two and One and Three but the difference is not significant between Groups Two and Three.

To further investigate the relationship between the three groups concerning this perception and exactly how they feel concerning an ATC assignment and its effect on their careers, the frequency distribution of responses by each group was analyzed. These results are presented on the next page in Table IV.

TABLE IV  
ATC ASSIGNMENT EFFECT ON CAREER POTENTIAL

RESPONSE	GROUP 1		GROUP 2		GROUP 3	
	FREQ	PCT	FREQ	PCT	FREQ	PCT
Very Improved	7	1.3	13	9.9	6	9.5
Slightly Improved	45	8.1	21	16.0	15	23.8
Unaffected	133	24.1	18	13.7	16	25.4
Slightly Decreased	239	43.2	43	32.8	14	22.2
Very Decreased	129	23.3	36	27.5	12	19.0
Mean	3.792		3.519		3.175	

Table IV shows the number and percentage of responses to each alternative for each survey group. The mean scores were calculated by assigning values to each response alternative of 1-5, with 1 representing "Very Improved". An investigation of the mean scores for each group shows that the perception of the effect an ATC assignment has on career potential is progressively improved from Group One through Group Three. This supports the statistical results of Hypothesis 1, that there is a difference in this perception between the three groups and it is important to note that those pilots who have a greater exposure to ATC and its actual effect on promotion and career potential have a more positive perception of ATC's impact. Even though this

perception improves, it is apparent that all three groups agree that an ATC assignment decreases the chances for promotion and career advancement to some degree. The percentage of pilots who perceive that an ATC assignment decreases the chances for promotion and career advancement is over 60% for Groups One and Two and over 40% for Group Three. A large percentage of the remaining pilots in each group are undecided as to the effects of ATC.

Hypothesis 2:

For MAC pilots currently vulnerable for ATC assignments, the decision to separate from the Air Force if selected for ATC and their perception of how ATC would affect their chances for promotion and career advancement are independent.

The results of Hypothesis 1 show the perception Group One pilots have towards an ATC assignment and what its perceived effect would be on their career. Table IV shows the actual number and percentage of the group that responded to each alternative. The results reflect that the majority of this group feels an ATC assignment would decrease their chances for promotion and career advancement. Hypothesis 2 is an attempt to see if this attitude has any influence on the decision to separate from the Air Force if pilots are selected for ATC. Survey question 14 asked this group, "If you are selected for an ATC assignment would you elect to separate from the Air Force rather than accept the assignment? (Assume you would have that option)". In order to test this hypothesis the responses to this question and the

one examined by Hypothesis 1 were cross tabulated. For simplification, each question was regrouped into three possible responses. Table V depicts the combinations of possible responses to each question.

TABLE V  
HYPOTHESIS 2 - CROSS-TABULATION

		Question #14 Would You Separate?			
		Yes	Undecided	No	Total
Question #13 Effect of ATC Assignment?	Improved	14 2.5%	5 0.9%	33 6.0%	52 9.4%
	Unaffected	41 7.4%	23 4.2%	70 12.6%	134 24.2%
	Decreased	160 28.9%	76 13.7%	132 23.8%	368 66.4%
	Totals	215 38.8%	104 18.8%	235 42.4%	554 100.0%

Table V depicts the number of responses in each cell along with the percentage of responses to each combination of questions. To test Hypothesis 2, a Chi-squared analysis was performed using a .05 level of significance and 4 degrees of freedom. A Chi-square value of 9.48773 or less is required to accept the null hypothesis that the decision to

separate is independent of the perceived effect an ATC assignment would have on a career (1:898). The results of the Chi-squared analysis produced a Chi-square value of 21.68427 with a 0.0002 level of significance. Therefore, the null hypothesis is rejected in favor of the alternative hypothesis which states that, for Group One, the decision to separate from the Air Force if selected for an ATC assignment is dependent on their perception of how an ATC assignment would affect their chances for promotion and career advancement. This confirms that there is a relationship between these two questions, and since the majority of this group perceives ATC as decreasing their chances for promotion and career advancement, this perception seems to be influencing their decision to separate from the Air Force if they receive an assignment to ATC. It is important to realize that current assignment policies select pilots for ATC duties while they still have a service commitment which does not allow them to turn down the assignment (6). Even though this policy prevents them from refusing the assignment, these attitudes and perceptions towards ATC exist and are carried into their next assignment.

Hypothesis 3:

For MAC pilots currently assigned to ATC, the decision to separate from, or remain in, the Air Force and their perception of how ATC has affected their chances for promotion and career advancement are independent.

The results of Hypothesis 1 have already established the perceived effect ATC has on promotion and career advancement for Group Two. Over 60% of those who responded to the survey felt their ATC assignment has decreased their career potential to some degree. Hypothesis 3 is an attempt to examine the relationship between this perception and the decision to separate from, or remain in, the Air Force. Question 22 was cross-tabulated with question 23 which asks, "Do you plan on staying in the Air Force beyond your present commitment?". As in Hypothesis 2 the responses for each

TABLE VI  
HYPOTHESIS 3 - CROSS-TABULATION

		Question #23 Do You Plan On Staying In?			
		Yes	Undecided	No	Total
Question #22 Effect of ATC Assignment?	Improved	23 17.3%	6 4.5%	5 3.8%	34 25.6%
	Unaffected	8 6.0%	5 3.8%	5 3.8%	18 13.5%
	Decreased	21 15.8%	15 11.3%	45 33.8%	81 61.0%
	Totals	52 39.1%	26 19.5%	55 41.4%	133 100.0%

question were regrouped into three categories for simplification. The cross-tabulation is presented in Table VI.

An examination of Table VI shows that 61% of Group Two perceives that their ATC assignment has decreased their chances for promotion and career advancement and over 41% are planning to get out of the Air Force at the end of their commitment. A Chi-squared analysis was performed on this data to determine if these two variables are independent or dependent of each other. Using a .05 level of significance and 4 degrees of freedom, a Chi-square value of 9.48773 or less was needed to accept the null hypothesis that these two are independent (1:899). The Chi-square value calculated from this data was 22.13551 with a 0.0002 level of significance. Therefore, as in Hypothesis 2, the null hypothesis was rejected in favor of the alternative hypothesis which states that, for MAC pilots assigned to ATC, the decision to separate from, or remain in, the Air Force is dependent on their perception of how ATC has affected their chances for promotion and career advancement. Since Hypothesis 1 determined that this group perceives ATC assignments as detrimental to their career potential, this perception is related to their decision to separate from the Air Force. An investigation of question 24, which asks if their ATC assignment is a factor in this decision, supports the results of this hypothesis. Over 60% of the respondents stated that ATC

would be a factor in their decision to separate from, or remain in, the Air Force.

Hypothesis 4:

For MAC pilots who have completed ATC assignments, the decision to separate from, or remain in, the Air Force and their perception of how ATC affected their chances for promotion and career advancement are independent.

As in the previous two hypotheses, this is an attempt to examine the relationship between the perceived effect an ATC assignment has on career potential and the decision to separate from, or remain in, the Air Force. As discussed in Chapter II, this group consists of those pilots who have completed ATC assignments, therefore those MAC pilots who separated following this assignment are not represented. Survey questions 35 and 39 were used to test this hypothesis and represent the same questions asked to Group Two. The cross-tabulation of these two questions is presented in Table VII.

The results of this cross-tabulation shows that 41.3% of Group Three perceives that their ATC assignment decreased their chances for promotion and career advancement to some degree but of those individuals, there appears to be no significant difference in the decision to separate from or remain in, the Air Force. To test Hypothesis 4, using 4 degrees of freedom, a Chi-squared value of 9.48773 or less is again required to accept the null hypothesis that these two variables are independent (1:899). Using the above

TABLE VII  
HYPOTHESIS 4 - CROSS-TABULATION

		Question #39 Do You Plan On Staying In?			
		Yes	Undecided	No	Total
Question #35 Effect of ATC Assignment?	Improved	10 15.9%	6 9.5%	5 7.9%	21 33.3%
	Unaffected	5 7.9%	5 7.9%	6 9.5%	16 25.4%
	Decreased	11 17.5%	5 7.9%	10 15.9%	26 41.3%
	Totals	26 41.3%	16 25.4%	21 33.3%	63 100.0%

data, a Chi-square value of 2.14944 was computed with a 0.7083 level of significance. Unlike Hypotheses 2 and 3, the null hypothesis cannot be rejected in favor of the alternative hypothesis, which states that these two variables are dependent. Therefore, there does not appear to be a relationship between the perceived effect an ATC assignment had on their career and their decision to separate from, or remain in, the Air Force. The responses to question 40, which specifically asks if their ATC assignment would be a factor in their decision to get out or stay in,

supports the results of this hypothesis. The results show a fairly equal distribution between the response alternatives, with 44.4% saying yes and 39.7% saying no.

### Results of Investigative Questions

#### Investigative Question 1:

Is the relationship between the decision to separate from, or remain in, the Air Force and the perceived effect an ATC assignment has on the chances for promotion and career advancement the same for all three survey groups?

The results of Hypotheses 2, 3 and 4 clearly show that this relationship is not the same for all three survey groups. Groups One and Two, those pilots vulnerable for ATC and those currently in ATC, both show a significant dependence between the perceived effect an ATC assignment has on their career and their decisions regarding remaining in, or separating from, the Air Force. The Chi-square value computed for these two groups, approximately 21 and 22 respectively, is significantly greater than the value of 9.488 required to reject the hypothesis that they are independent. In contrast to this, however, Group Three does not show any statistical dependence between their perception towards the effect of their ATC assignment and their decision to separate from, or remain in, the Air Force. Of importance, is the fact that Group Three does not contain those individuals who separated from the Air Force following their ATC assignment. This indicates the fact that those individuals who

are planning to separate from the service in this group are doing so for reasons other than their ATC assignment, whereas this decision for the first two groups is dependent on how they perceive ATC will affect their chances for promotion and career advancement. This does not mean, however, that ATC is the sole factor for making this decision. Certainly, there are numerous variables which are considered when deciding to stay in, or separate from, the Air Force.

Investigative Question 2:

Are MAC pilots treated the same as pilots from other Major Commands during their ATC assignment? Is this perception the same for those pilots currently in ATC and those who have completed an ATC assignment?

It has already been established that all three of the survey groups perceive that ATC tends to decrease their chance for promotion and career advancement, even though the degree to which this perception exists varies between the groups. Also, the decision to separate from, or remain in, was shown to be dependent on this perception for Groups One and Two. This question attempts to examine the treatment of MAC pilots during their ATC assignment. To answer the first part of this question the responses to the question, "How do you feel MAC pilots are treated in ATC relative to pilots from other commands?", were examined. Table VIII contains the responses to this question for Groups Two and Three. The results show that only a small percentage of pilots in both groups feel MAC pilots are treated better to some

TABLE VIII  
RESPONSES TO SURVEY QUESTIONS 27 AND 43

RESPONSE	GROUP 2		GROUP 3	
	FREQ	PCT	FREQ	PCT
Much Better	0	0.0	0	0.0
Slightly Better	6	4.6	4	6.3
Same	81	61.8	42	66.7
Slightly Worse	28	21.4	9	14.3
Much Worse	16	12.2	8	12.7

degree, than pilots from other commands, with a larger percentage feeling MAC pilots are treated worse.

The majority of pilots, however, seem to agree that MAC pilots are treated the same as pilots from other commands. To answer the second part of this question, the following hypothesis was tested: There is no difference between MAC pilots currently assigned to ATC and MAC pilots who have completed ATC assignments in their perceived treatment of MAC pilots relative to other pilots assigned to ATC. A t-test analysis was performed on the responses to this question to see if there is a statistical difference between these two groups. Using a .05 level of significance and 120 degrees of freedom a t-value of 1.96 or less was needed to accept this hypothesis. The calculated t-value was 0.66,

with a 0.509 level of significance. Therefore, the hypothesis is accepted and the perceived treatment of MAC pilots is the same for both groups. Combining this with the first part of this question it appears that both groups feel MAC pilots are treated the same as pilots from the other commands during their ATC assignment. Since Group Two pilots are currently in ATC and Group Three pilots have completed an ATC assignment, it seems that this perception of treatment was constant over time.

Investigative Question 3:

What are the percentages of MAC pilots promoted to each pay grade in the following groups: Those who have had ATC assignments and those who have not?

This question was an attempt to investigate any career differences between MAC pilots who have served in ATC and those who never had ATC assignments. The pilots in both groups started their careers in MAC, have either the C-5, C-141, or C-130 as their Major Weapon System and are currently serving in MAC. The pilots were further broken into year groups between 1970 and 1980. Along with the grade of the pilots in each group, the following was also investigated:

1. The number of Below the Promotion Zone selections.
2. The number of pilots deferred to the next grade.
3. The number of Major Command and USAF Headquarters tours.

Table IX contains the results of the historical data used for this investigation. In all three year groups

TABLE IX  
HISTORICAL DATA ANALYSIS

YEAR GROUP	DEMOGRAPHIC CATEGORY	ATC		NON-ATC	
		FREQ	PCT	FREQ	PCT
1970-1973	Total Number	83	18.0	377	82.0
	Pay Grade				
	Captain	8	9.6	21	5.5
	Major	64	77.1	269	71.4
	Lt Col	11	13.3	87	23.1
	Below Zone Promotions	2	2.4	20	5.3
	Pilots Passed Over	16	19.2	52	13.8
	Higher HQ Tours	18	21.7	177	47.1
1974-1977	Total Number	64	12.6	444	87.4
	Pay Grade				
	Captain	35	54.7	213	48.1
	Major	29	45.3	231	52.0
	Below Zone Promotions	0	0.0	20	4.5
	Pilots Passed Over	11	17.2	35	7.9
	Higher HQ Tours	7	11.0	103	23.2
1978-1980	Total Number	14	3.2	427	96.8
	Pay Grade				
	Captain	13	92.9	427	100.0
	Major	1	7.1	0	0.0
	Below Zone Promotions	0	0.0	0	0.0
	Pilots Passed Over	0	0.0	0	0.0
	Higher HQ Tours	0	0.0	16	3.8

examined, those pilots who had ATC assignments did not compete as well as those who did not go to ATC in almost all categories. For example, in the 1970-1973 year group, a lower percentage of pilots have been promoted to Lt Col in the ATC Group and they have also had a correspondingly higher percentage of pilots who have been passed over for promotion than those pilots in the Non-ATC Group. The number of pilots who have had Higher Headquarters assignments, which is an indication of career progression, is markedly higher for those without ATC tours (47% versus 21% in this year group). This same trend seems to continue in the other two year groups examined.

In the four categories examined, those pilots without ATC assignments appear to have had faster promotions and greater opportunity for career advancing assignments, such as HQ MAC and USAF Headquarters tours. A complete breakdown of the data, using four separate year groups, which was provided from MPC, is found in Appendix D. This data also provides additional information, such as rated supplement tours, completion of PME and completion of advanced education. This data is consistent with the information presented in Table IX.

When analyzing and attempting to interpret this data, it is important to consider the limitations of the information provided. This data contains only those individuals who fall into one of the two groups and are currently as-

signed to MAC. This would eliminate someone who went to ATC, did extremely well and is currently assigned to a command other than MAC. Also, the data does not represent actual promotion rates for the two groups since pilots currently in other commands or who have separated from the Air Force are not represented. Therefore, drawing conclusions about promotion opportunities for the two groups is not possible. Although the distinguishing variable between the two groups is whether or not they had an ATC assignment, it cannot be concluded that this was the reason for the differences in promotions and assignment opportunities, since each career must be considered unique.

Along with these limitations, however, there is value in the results of this investigation. Since those pilots examined are currently in MAC, it is their opinions and attitudes towards ATC assignments which are passed on to those young pilots vulnerable for ATC and those currently assigned to ATC. If a higher percentage of those pilots whose careers included ATC have not done as well as their contemporaries in MAC, this attitude may be expressed to other pilots who are currently deciding whether or not to separate from, or remain in, the Air Force should they be faced with an ATC assignment. When taken in its proper context, this historical data provides insightful information concerning the career differences between MAC pilots who have had ATC assignments and those who have not.

### Analysis Summary

All statistical analysis was completed and the hypotheses tested were satisfactorily accepted or rejected. The investigative questions were answered using the survey responses, statistical tests and analysis of historical data. The survey itself contained other specific questions which were not addressed in this research, but were included at the request of MAC Assignment and Retention personnel to help them address other current issues. The reader is directed to Appendix C, Survey Results, for the responses to those individual questions by group. The following chapter draws conclusions, based on the results of the preceeding analysis and makes specific recommendations for future research efforts.

#### IV. Summary and Recommendations

##### Summary

The primary objective of this research was to measure the attitudes and perceptions towards ATC assignments by MAC pilots. It specifically attempted to investigate the attitudes of three separate groups of MAC pilots: Those pilots currently vulnerable for an ATC assignment, those pilots currently assigned to ATC and MAC pilots who have completed an ATC assignment. Any differences in attitudes towards ATC, between these three groups, was investigated. The secondary objective was to investigate promotion and career differences between two groups of MAC pilots: Those who have had an ATC assignment and those who have not.

The primary objective was accomplished by the use of a survey. The results of the survey indicated that all three of the survey groups perceive that an ATC assignment decreases their chances for promotion and career advancement. The degree to which this perception exists is different among the three groups, with those currently vulnerable for an ATC assignment having the most negative attitude. Pilot retention issues were shown to be related to ATC assignments for the first two groups. The decision to separate from, or remain in, the Air Force is dependent on the perception towards ATC assignments for these groups. Since both perceive ATC as detrimental to their chances for promotion and career advancement, this perception is influencing the

decision to separate from the Air Force. Group Three, however, indicates no dependent relationship between their perception of ATC assignments and the decision to separate from, or remain in, the Air Force. It is important to remember that this group does not contain those pilots who served in ATC and separated from the Air Force following their assignment.

The secondary objective was accomplished by analyzing historical data which was obtained from MPC. This data contained the percentage of officers who were in each pay grade from the 1970-1980 year groups. It was broken down between MAC pilots who had ATC assignments and those who did not. Other information was also provided, such as deferment of officers to the next pay grade, below the zone promotions and Higher Headquarters assignments. The usefulness of this information was limited, however, since it did not contain actual promotion rates, or, represent MAC pilots in either group who are not currently assigned to MAC or who have separated from the Air Force. The information analyzed indicated that those pilots currently assigned to MAC, who have completed ATC assignments have not done as well as their contemporaries in MAC who never went to ATC. Between the two groups investigated those who did not go to ATC were promoted faster, had fewer deferred promotions, more below the zone promotions, and more Higher HQ assignments than their contemporaries who went to ATC. This analysis did not

establish that ATC assignments were the reasons for these career differences. These two group are, however, currently assigned to MAC and are influencing those pilots in a position to go to ATC and those who have returned to MAC after completing their ATC assignments.

### Recommendations

The survey results show conclusively that MAC pilots view ATC as a negative assignment and the historical data provides some possible indication as to why these perceptions exist. With these results there are definite actions which can be taken to further investigate and help alleviate these perceptions. The following recommendations are offered.

Recommendation One. A further investigation should be initiated to help clarify why MAC pilots believe an ATC assignment decreases their chances for promotion and career advancement. Specifically, why they feel their contemporaries who remain in MAC have an increased chance for promotion and career advancement. This could be accomplished by survey or interviewing a sample of MAC pilots.

Recommendation Two. Since this research indicates that MAC pilots view ATC as a detriment to their career, MAC assignment personnel should investigate how those pilots who go to ATC are utilized following this assignment. There must be some basis for this negative perception, since it exist to some degree for all three survey groups. This

investigation might reveal some underlying cause for these perceptions and attitudes towards ATC. If the same opportunities are equally available to those who return from ATC and those who remained in MAC, then this information could be used to dispell the perception that ATC assignments have a negative impact on career opportunities.

Recommendation Three. MAC Assignment and Retention Personnel should coordinate with MPC Data Analysis to investigate actual promotion rates for those MAC pilots who go to ATC and those who do not. Unlike the historical data analysis accomplished by this research, it should contain everyone in these two groups, to include those pilots who have since separated from the Air Force. Career briefs could be used to indicate how those pilots who went to ATC performed following their assignment. Like Recommendation Two, this information could offer possible reasons for current perceptions regarding ATC or could be used to dispell any misperceptions that are found to exists.

### Conclusion

The perception that ATC assignments decrease chances for promotion and career advancement is pervasive among MAC pilots. For MAC pilots who are vulnerable for such assignments, and those currently serving in ATC, this perception is related to the decision to separate from the Air Force. Also, there is some evidence which supports the fact that those pilots who go to ATC do not have the same career

opportunities as those pilots who remain in MAC. These facts have serious implications with respect to current retention issues. MAC and ATC Personnel specialist should further investigate these issues and implement programs to help eliminate this attitude towards ATC assignments. This negative attitude towards ATC did not develop overnight and, in turn, will not disappear quickly. MAC's Senior Officers need to ensure that individuals who return from ATC assignments are effectively utilized and afforded the same career opportunities as those who remain in MAC. Only through this type of effort, will the negative attitude towards ATC assignments begin to change.

## Appendix A: Survey



DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY  
AIR FORCE INSTITUTE OF TECHNOLOGY  
WRIGHT-PATTERSON AIR FORCE BASE OH 45433-6583


2 MAR 1986

REPLY TO: LS (Captain Porter/56569)  
ATTN OF:

SUBJECT: Military Airlift Command (MAC) Pilot Attitude Survey

TO: Applicable Pilots

1. You have been selected to participate in a HQ MAC-sponsored survey intended to assess the attitudes of MAC pilots regarding an ATC assignment. As you know, each major aircraft weapon system is obligated to provide pilots for instructor pilot duty. We are interested in obtaining your perceptions of an ATC assignment.
2. The data we gather will be provided to HQ MAC and will become part of an AFIT research project. Your participation is strictly voluntary, and you are not asked to provide identifying data such as name or social security number. Please provide your most honest opinion.
3. Please return your completed survey and computer scan sheet as soon as possible, but no later than 1 June 1986. Thank you very much for your participation.

  
LARRY L. SMITH, Colonel, USAF  
Dean  
School of Systems and Logistics

3 Atatch.

1. Questionnaire
2. Computer Scan Sheet
3. Return Envelope

## INSTRUCTIONS ----- PLEASE READ CAREFULLY

This survey contains a total of FOUR sections, but you will need to complete only TWO of the sections. SECTION I must be completed by everyone. Then complete one other section based on your experience as explained below.

\*\*\*\*\*  
 \*\*\*\*\*  
 SECTION I (Questions 1-8)

THIS SECTION MUST BE COMPLETED BY EVERYONE!

\*\*\*\*\*  
 SECTION II (Questions 9-16)

MUST BE COMPLETED BY ONLY THOSE OFFICERS WHO ARE SERVING IN THEIR FIRST ASSIGNMENT FOLLOWING GRADUATION FROM PILOT TRAINING AND WHO ARE CURRENTLY FLYING THE C-130, C-141 OR C-5.

\*\*\*\*\*  
 SECTION III (Questions 17-29)

MUST BE COMPLETED BY ONLY THOSE OFFICERS WHOSE INITIAL MAC ASSIGNMENT FOLLOWING PILOT TRAINING WAS IN THE C-130, C-141 OR C-5 AND WHO ARE CURRENTLY ASSIGNED TO AIR TRAINING COMMAND.

\*\*\*\*\*  
 SECTION IV (Questions 30-44)

MUST BE COMPLETED BY ONLY THOSE OFFICERS WHOSE INITIAL MAC ASSIGNMENT FOLLOWING PILOT TRAINING WAS IN THE C-130, C-141 OR C-5 AND WHO SUBSEQUENTLY HAVE COMPLETED A TOUR IN AIR TRAINING COMMAND.

NOTE: If you do not fall into one of these specific categories please fill out the most appropriate section based on your experience.

Remember, you are asked to complete SECTION I and only one of the remaining sections depending on the above criteria.

IMPORTANT!! After completing the survey please:

- Use a number 2 pencil.
- Transfer answers to computer scan sheet provided.
- Do not fill in any personal data(name, SSAN, etc..).
- Ensure the numbers on the computer scan sheet correspond to the the numbers of the survey questions.
- Place completed survey and computer scan sheet in return envelope provided(DO NOT FOLD).
- Place in mail.

Thank you for your time and cooperation!

\*\*\*\*\*  
\* SECTION I \*  
\* COMPLETED BY EVERYONE \*  
\*\*\*\*\*

1. What is your present grade?

1. O-1
2. O-2
3. O-3
4. O-4 or higher

2. What is your age?

1. 22 - 26
2. 27 - 30
3. Over 30

3. What is your sex?

1. Male
2. Female

4. What is your marital status?

1. Married
2. Not married

5. How many years total commissioned service have you completed?

1. 4 years or less
2. 5 - 8 years
3. Over 8 years

6. What is your highest level of education?

1. College graduate
2. Some graduate work
3. Graduate degree

7. What is the highest level of Professional Military Education you have completed?

1. Squadron Officer School (correspondence or in residence)
2. Air Command and Staff (correspondence, seminar or in residence)
3. Other(Please specify \_\_\_\_\_ )
4. None

8. Did you have any active duty assignment prior to Undergraduate Pilot Training?

1. Yes (Please specify \_\_\_\_\_ )
2. No

END OF SECTION I

\*\*\*\*\*  
\* SECTION II \*  
\* TO BE COMPLETED BY ONLY THOSE OFFICERS WHO ARE SERVING \*  
\* IN THEIR FIRST ASSIGNMENT FOLLOWING PILOT TRAINING AND WHO ARE \*  
\* CURRENTLY FLYING THE C-130, C-141 OR C-5. \*  
\*\*\*\*\*

9. What aircraft are you currently assigned to fly?

1. C-130
2. C-141
3. C-5
4. Other (Please specify \_\_\_\_\_)

10. What crew position are you currently qualified in?

1. Co-pilot
2. First pilot
3. Aircraft Commander
4. Instructor Pilot or higher

11. How likely do you feel your chances are to receive an assignment to Air Training Command(ATC) in the next several years?

1. Impossible
2. Unlikely
3. Unsure
4. Likely
5. Certain

12. Would you consider volunteering for ATC?

1. Definitely yes
2. Probably yes
3. Undecided
4. Probably no
5. Definitely no

13. How do you feel your chances for promotion and career advancement would be affected by an assignment to ATC?

1. Very improved
2. Slightly improved
3. Unaffected
4. Slightly decreased
5. Very decreased

14. If you are selected for an ATC assignment would you elect to separate from the Air Force rather than accept the assignment? (Assume you would have that option)

1. Definitely yes
2. Probably yes
3. Undecided
4. Probably no
5. Definitely no

15. Where do you receive most of your information concerning ATC assignments?

1. Other pilots
2. Squadron Commanders
3. Both
4. Others (Please specify \_\_\_\_\_ )

16. Has the MAC Squadron Commander Involvement Program improved the ATC assignment process?

1. Very improved
2. Slightly improved
3. Unaffected
4. Slightly decreased
5. Very decreased
6. I am unaware of the program

END OF SECTION II  
REMEMBER TO FILL OUT COMPUTER SCAN SHEET - THANK YOU!

\*\*\*\*\*  
 \* SECTION III \*  
 \* TO BE COMPLETED BY ONLY THOSE OFFICERS WHOSE INITIAL MAC \*  
 \* ASSIGNMENT FOLLOWING PILOT TRAINING WAS IN THE C-130, C-141 \*  
 \* OR C-5 AND WHO ARE CURRENTLY ASSIGNED TO AIR TRAINING COMMAND.\*  
 \*\*\*\*\*

17. What aircraft were you originally assigned to following graduation from Undergraduate Pilot Training?

1. C-130
2. C-141
3. C-5
4. Other (Please specify \_\_\_\_\_)

18. What was the highest crew position you attained prior to going to ATC?

1. Co-pilot
2. First pilot
3. Aircraft Commander
4. Instructor Pilot or higher

19. Were you a volunteer for an ATC assignment?

1. Yes
2. No

20. When you received your assignment to ATC were you in a position to separate from the Air Force rather than accept the assignment?

1. Yes (go to item 22)
2. No

21. If the answer to question 20 was NO, would you have separated from the Air Force if you had been able to?

1. Definitely yes
2. Probably yes
3. Undecided
4. Probably no
5. Definitely no

22. How do you feel your chances for promotion and career advancement have been affected by your assignment to ATC?

1. Very Improved
2. Slightly Improved
3. Unaffected
4. Slightly Decreased
5. Very decreased

23. Do you plan on staying in the Air Force beyond your present commitment?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
24. Will your assignment to ATC be a factor in your decision to either separate or stay in the Air Force?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
25. Did you get one of your top three choices of base when you received your assignment to ATC?
1. Yes
  2. No
26. Did you get your choice of aircraft when you received your assignment to ATC?
1. Yes
  2. No
27. How do you feel MAC pilots are treated in ATC relative to pilots from other commands?
1. Much better
  2. Slightly better
  3. Same
  4. Slightly worse
  5. Much worse
28. Would you recommend an ATC assignment to other MAC pilots?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
29. Given the opportunity would you remain in ATC?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no

END OF SECTION III  
REMEMBER TO FILL OUT COMPUTER SCAN SHEET - THANK YOU!

\*\*\*\*\*  
 \* SECTION IV \*  
 \* TO BE COMPLETED BY ONLY THOSE OFFICERS WHOSE INITIAL MAC \*  
 \* ASSIGNMENT FOLLOWING PILOT TRAINING WAS IN THE C-130, C-141 \*  
 \* OR C-5 AND WHO SUBSEQUENTLY HAVE COMPLETED AN ASSIGNMENT TO \*  
 \* AIR TRAINING COMMAND. \*  
 \*\*\*\*\*

30. What aircraft were you first assigned to following graduation from Undergraduate Pilot Training?

1. C-130
2. C-141
3. C-5
4. Other (Please specify \_\_\_\_\_)

31. What was the highest crew position you attained prior to going to ATC?

1. Co-pilot
2. First pilot
3. Aircraft Commander
4. Instructor Pilot or higher

32. Were you a volunteer for ATC?

1. Yes
2. No

33. When you received your assignment to ATC were you in a position to separate from the Air Force rather than accept the assignment?

1. Yes (go to item 35)
2. No

34. If the answer to question 33 was NO, would you have separated from the Air Force if you had been able to?

1. Definitely yes
2. Probably yes
3. Undecided
4. Probably no
5. Definitely no

35. How do you feel your chances for promotion and career advancement were affected by your assignment to ATC?

1. Very Improved
2. Slightly Improved
3. Unaffected
4. Slightly Decreased
5. Very Decreased

36. What type of duty are you currently assigned to?
1. Flying the same aircraft as before my ATC assignment
  2. Flying a different aircraft than before my ATC assignment
  3. Non-Flying assignment
37. How satisfied are you with your current assignment?
1. Very satisfied
  2. Slightly satisfied
  3. Neutral
  3. Slightly dissatisfied
  4. Very dissatisfied
38. Do you feel you would have a better present assignment if you had not gone to ATC?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
39. Do you plan on staying in the Air Force beyond your present commitment?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
40. Will your assignment to ATC be a factor in your decision to separate or stay in the Air Force?
1. Definitely yes
  2. Probably yes
  3. Undecided
  4. Probably no
  5. Definitely no
41. Did you get one of your first three choices of base when you received your assignment to ATC?
1. Yes
  2. No
42. Did you get your choice of aircraft when you received your assignment to ATC?
1. Yes
  2. No

43. How do you feel MAC pilots were treated in ATC relative to pilots from other commands?

1. Much better
2. Slightly better
3. Same
4. Slightly worse
5. Much worse

44. Would you recommend an ATC assignment to other MAC pilots?

1. Definitely yes
2. Probably yes
3. Undecided
4. Probably no
5. Definitely no

END OF SECTION IV  
REMEMBER TO FILL OUT COMPUTER SCAN SHEET - THANK YOU!

## Appendix B: Survey Group Criteria

The following information represents the specific criteria which was used to identify individuals in each of the survey groups. This criteria was programmed and used to access the Atlas Data Base at MPC in order to receive the names of those individuals.

### Group One

1. Must currently hold one of the following AFSC's: 105X B, 104X L or N.
2. Received their pilot training AFSC 0006, no earlier than 1 January 82.
3. Have an Effective Active Duty (EAD) date no earlier than 1 January 81.

### Group Two

1. Must currently hold one of the following AFSC's: 1355 B or C or M1355 B or C.
2. Previously held any of the following AFSC's: 105X B, 104X L or N.
3. Have an EAD date no earlier than 1 January 77.

### Group Three

1. Must have an EAD date no earlier than 1 January 74.
2. Received their pilot training AFSC 0006, no earlier than 1 January 75.
3. Have one of the following RIDM codes (DIN: APY-20): GN, HA, HB, HC, HD.
4. Received this RIDM code prior to receiving AFSC 1355 B or C, and held one of these AFSC's between 1 January 82 and 31 December 85.
5. They may currently hold any AFSC.

## Appendix C: Survey Results

### Response Rate to Survey

Group One:      Population Size - 734      Surveys Returned - 555  
                     Response Rate -  $555/734 = 75.6\%$

Group Two:      Population Size - 183      Surveys Returned - 131  
                     Response Rate -  $131/183 = 71.6\%$

Group Three:    Population Size - 92      Surveys Returned - 63  
                     Response Rate -  $63/92 = 68.5\%$

### Survey Question Responses

Question 1: What is your present grade?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
0-1	85	15.3	0	0.0	0	0.0
0-2	392	70.8	4	3.1	0	0.0
0-3	77	13.9	117	89.3	60	95.2
0-4 or higher	0	0.0	10	7.6	3	4.8

Question 2: What is your age?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
22-26	385	69.6	10	7.6	4	6.3
27-30	163	29.5	72	55.0	19	30.2
Over 30	5	0.9	49	37.4	40	63.5

Question 3: What is your sex?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
Male	535	96.7	127	96.9	62	98.4
Female	18	3.3	4	3.1	1	1.6

Question 4: What is your marital status?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
Married	295	53.3	103	78.6	57	90.5
Not Married	258	46.7	28	21.4	6	9.5

Question 5: How many years total commissioned service have you completed?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
4 years or less	512	92.3	13	9.9	1	1.6
5 - 8 years	42	7.6	78	59.5	25	39.7
Over 8 years	1	0.2	40	30.5	37	58.7

Question 6: What is your highest level of education?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
College Graduate	483	87.2	73	55.7	30	47.6
Some Graduate Work	55	9.9	42	32.1	19	30.2
Graduate Degree	16	2.9	16	12.2	14	22.2

Question 7: What is the highest level of Professional Military Education you have completed?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
SOS	157	28.3	66	50.4	26	41.3
ACSC	5	0.9	30	22.9	32	50.8
Other	6	1.1	2	1.5	3	4.8
None	386	69.7	33	25.2	2	3.2

Question 8: Did you have any active duty assignment prior to Undergraduate Pilot Training?

Response	Group 1		Group 2		Group 3	
	Freq	Pct	Freq	Pct	Freq	Pct
Yes	48	8.7	26	20.0	12	19.0
No	505	91.2	104	80.0	51	81.0

Questions Answered by Group 1

Question 9: What aircraft are you currently assigned to fly?

Response	Freq	Pct	Response	Freq	Pct
C-130	282	50.9	C-5	4	0.7
C-141	266	48.0	Other	2	0.4

Question 10: What crew position are you currently qualified in?

Response	Freq	Pct	Response	Freq	Pct
Co-Pilot	302	54.5	Aircraft Cmdr	119	21.5
First Pilot	115	20.8	IP or Higher	18	3.2

Question 11: How likely do you feel your chances are to receive an assignment to ATC in the next several years?

Response	Freq	Pct	Response	Freq	Pct
Certain	9	1.6	Unlikely	180	32.5
Likely	122	22.0	Impossible	19	3.4
Unsure	224	40.4			

Question 12: Would you consider volunteering for ATC?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	29	5.2	Probably No	155	28.0
Probably Yes	52	9.4	Definitely No	244	44.0
Undecided	74	13.4			

Question 13: How do you feel your chances for promotion and career advancement would be affected by an assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Very Improved	7	1.3	Slightly Decreased	239	43.2
Slightly Improved	45	8.1	Very Decreased	129	23.3
Unaffected	133	24.1			

Question 14: If you are selected for an ATC assignment, would you elect to separate from the Air Force rather than accept the assignment? (Assume you would have that option)

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	99	17.9	Probably No	152	27.4
Probably Yes	117	21.1	Definitely No	82	14.8
Undecided	104	18.8			

Question 15: Where do you receive most of your information concerning ATC assignments?

Response	Freq	Pct	Response	Freq	Pct
Other Pilots	343	62.6	Both	162	29.6
Squadron Cmdrs	10	1.8	Others	32	5.8

Question 16: Has the MAC Squadron Commander Involvement Program improved the ATC assignment process?

Response	Freq	Pct	Response	Freq	Pct
Very Improved	35	6.4	Slightly Decreased	12	2.2
Slightly Improved	98	17.9	Very Decreased	9	1.6
Unaffected	109	19.9	Unaware of Program	285	52.0

#### Questions Answered by Group 2

Question 17: What aircraft were you originally assigned to following graduation from Undergraduate Pilot Training?

Response	Freq	Pct	Response	Freq	Pct
C-130	47	35.9	C-5	0	0.0
C-141	76	58.0	Other	8	6.1

Question 18: What was the highest crew position you attained prior to going to ATC?

Response	Freq	Pct	Response	Freq	Pct
Co-Pilot	22	16.9	Aircraft Cmdr	53	40.8
First Pilot	48	36.6	IP or Higher	7	5.4

Question 19: Were you a volunteer for an ATC assignment?

Response	Freq	Pct	Response	Freq	Pct
Yes	62	47.3	No	69	52.7

Question 20: When you received your assignment to ATC were you in a position to separate from the Air Force rather than accept the assignment?

Response	Freq	Pct	Response	Freq	Pct
Yes	14	10.7	No	117	89.3

Question 21: If the answer to question 20 was no, would you have separated from the Air Force if you had been able?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	14	12.0	Probably No	30	25.6
Probably Yes	31	26.5	Definitely No	28	23.9
Undecided	14	12.0			

Question 22: How do you feel your chances for promotion and career advancement have been affected by your assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Very Improved	13	9.9	Slightly Decreased	43	32.8
Slightly Improved	21	16.0	Very Decreased	36	27.5
Unaffected	18	13.7			

Question 23: Do you plan on staying in the Air Force beyond your present commitment?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	25	19.1	Probably No	22	16.8
Probably Yes	25	19.1	Definitely No	33	25.2
Undecided	26	19.8			

Question 24: Will your assignment to ATC be a factor in your decision to either separate or stay in the Air Force?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	56	42.7	Probably No	26	19.8
Probably Yes	28	21.4	Definitely No	19	14.5
Undecided	2	1.5			

Question 25: Did you get one of your top three choices of base when you received your assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Yes	117	89.3	No	14	10.7

Question 26: Did you get your choice of aircraft when you received your assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Yes	102	77.9	No	29	22.1

Question 27: How do you feel MAC pilots were treated in ATC relative to pilots from other commands?

Response	Freq	Pct	Response	Freq	Pct
Much Better	0	0.0	Slightly Worse	28	21.4
Slightly Better	6	4.6	Much Worse	16	12.2
Same	81	61.8			

Question 28: Would you recommend an ATC assignment to other MAC pilots?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	13	9.9	Probably No	40	30.5
Probably Yes	23	17.6	Definitely No	41	31.3
Undecided	14	10.7			

Question 29: Given the opportunity would you remain in ATC?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	14	10.7	Probably No	21	16.0
Probably Yes	10	7.6	Definitely No	80	61.1
Undecided	6	4.6			

Questions Answered by Group 3

Question 30: What aircraft were you first assigned to following graduation from Undergraduate Pilot Training?

Response	Freq	Pct	Response	Freq	Pct
C-130	22	35.5	C-5	3	4.8
C-141	37	59.7	Other	0	0.0

Question 31: What was the highest crew position you attained prior to going to ATC?

Response	Freq	Pct	Response	Freq	Pct
Co-Pilot	15	24.6	Aircraft Cmdr	22	36.1
First Pilot	18	29.5	IP or Higher	6	9.8

Question 32: Were you a volunteer for ATC?

Response	Freq	Pct	Response	Freq	Pct
Yes	31	49.2	No	32	50.8

Question 33: When you received your assignment to ATC were you in a position to separate from the Air Force rather than accept the assignment?

Response	Freq	Pct	Response	Freq	Pct
Yes	6	9.5	No	55	89.5

Question 34: If the answer to question 33 was No, would you have separated from the Air Force if you had been able to?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	8	13.6	Probably No	15	25.4
Probably Yes	8	13.6	Definitely No	19	32.2
Undecided	9	15.3			

Question 35: How do you feel your chances for promotion and career advancement were affected by your assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Very Improved	6	9.5	Slightly Decreased	14	22.2
Slightly Improved	15	23.8	Very Decreased	12	19.0
Unaffected	16	25.4			

Question 36: What type of duty are you currently assigned to?

Response	Freq	Pct	Response	Freq	Pct
Flying Same Acft	28	45.9	Non Flying	12	19.7
Different Acft	20	32.8			

Question 37: How satisfied are you with your current assignment?

Response	Freq	Pct	Response	Freq	Pct
Very Satisfied	28	44.4	Slightly Dissatisfied	11	17.5
Slightly Satisfied	16	25.4	Very Dissatisfied	0	0.0
Neutral	8	12.7			

Question 38: Do you feel you would have a better present assignment if you had not gone to ATC?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	20	31.7	Probably No	15	23.8
Probably Yes	15	23.8	Definitely No	4	6.3
Undecided	9	14.3			

Question 39: Do you plan on staying in the Air Force beyond your present commitment?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	18	28.6	Probably No	8	12.7
Probably Yes	8	12.7	Definitely No	13	20.6
Undecided	16	25.4			

Question 40: Will your assignment to ATC be a factor in your decision to separate or stay in the Air Force?

Response	Freq	Pct	Response	Freq	Pct
Definitely Yes	13	20.6	Probably No	16	25.4
Probably Yes	15	23.8	Definitely No	9	14.3
Undecided	10	15.9			

Question 41: Did you get one of your first three choices of base when you received your assignment to ATC?

Response	Freq	Pct	Response	Freq	Pct
Yes	45	71.4	No	18	28.6

Question 42: Did you get your choice of aircraft when you received your assignment to ATC?

<u>Response</u>	<u>Freq</u>	<u>Pct</u>	<u>Response</u>	<u>Freq</u>	<u>Pct</u>
Yes	40	63.5	No	23	36.5

Question 43: How do you feel MAC pilots were treated in ATC relative to pilots from other commands?

<u>Response</u>	<u>Freq</u>	<u>Pct</u>	<u>Response</u>	<u>Freq</u>	<u>Pct</u>
Much Better	0	0.0	Slightly Worse	9	14.3
Slightly Better	4	6.3	Much Worse	8	12.7
Same	42	66.7			

Question 44: Would you recommend an ATC assignment to other MAC pilots?

<u>Response</u>	<u>Freq</u>	<u>Pct</u>	<u>Response</u>	<u>Freq</u>	<u>Pct</u>
Definitely Yes	12	19.0	Probably No	10	15.9
Probably Yes	14	22.2	Definitely No	20	31.7
Undecided	7	11.1			

# Appendix D: Historical Data

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BATCH 442 PREPARED: 09/APR/88 ATLAS STAT SUMMARY INQUIRY 14548 - STANDARD RUN

MAC C-5, C-141, C-130 PILOT DEMOGRAPHICS

YN-OP* PATH	OR	TOT*	BPZ	DEF	200ER	14XX	RTDSUP	SOA	HAJCON	MACIO	IAF	SOS	153	MSDEG	PIID	AVGAGE
1	03	6	0	0	3	2	1	0	0	0	0	7	8	6	0	38.1
2	04	64	0	0	7	47	20	1	8	5	3	63	63	44	0	37.0
3	05	11	2	0	0	11	3	0	5	3	2	11	11	9	0	37.9
4	03	63	2	16	10	60	24	1	13	8	5	81	62	59	0	37.2
5	04	21	0	21	8	14	5	0	1	1	1	16	13	7	0	37.7
6	05	269	2	31	18	228	68	11	66	67	17	265	254	178	0	36.9
7	03	87	18	0	2	66	35	9	47	45	28	67	87	80	1	37.7
8	04	377	20	52	28	308	128	20	134	113	43	368	354	265	1	37.1
9	05	480	22	68	38	368	152	21	147	121	48	449	438	324	1	37.1
10	03	9	0	9	3	3	0	0	1	1	1	7	5	1	0	35
11	04	27	0	0	2	12	3	0	2	1	0	27	28	14	0	34.0
12	03	76	0	9	5	15	3	0	3	2	1	34	31	15	0	34.3
13	04	33	0	33	22	17	2	1	1	0	0	28	22	6	0	35.2
14	05	188	1	1	18	135	33	8	47	43	13	185	171	116	0	34.7
15	03	231	8	34	40	152	35	9	48	43	13	213	193	122	0	34.6
16	04	257	6	45	45	167	38	9	51	45	14	247	224	137	0	34.7
17	05	26	0	2	2	10	2	0	2	1	1	25	14	5	0	31.4
18	03	2	0	0	0	0	0	0	0	0	0	2	1	0	0	34
19	04	28	0	2	6	10	2	0	2	1	1	27	15	5	0	31.6
20	05	180	0	4	33	65	8	3	22	18	7	167	113	62	0	31.4
21	03	43	12	0	1	28	5	0	9	9	4	43	38	25	0	32.8
22	04	223	12	4	34	93	13	3	31	27	11	210	181	77	0	31.7
23	05	251	12	6	40	103	15	3	33	28	12	237	166	82	0	31.7
24	03	13	0	0	0	0	1	0	0	0	0	6	3	0	0	28.8
25	04	14	0	0	0	1	1	0	0	0	0	1	1	0	0	36
26	05	427	0	0	0	60	8	3	14	13	2	318	52	59	0	30.2
27	03	441	0	0	20	61	9	3	14	13	2	325	56	59	0	28.9
28	04	1409	42	117	143	699	214	36	245	207	76	1258	882	602	1	33.2

\*\*\*\* NOTICE: PERSONAL DATA REQUIRES SAFEGUARDING IAW AFR 700-10, AFR 12-35, & PL 93-579. \*\*\* UNCLAS - FOR OFFICIAL USE ONLY \*\*\*

\* See next page for an explanation of the column headings

EFFECTIVE DATE: 07/APR/88

MAC C-5, C-141, C-130 PILOT DEMOGRAPHICS

POPULATION

Pilots currently in MAC with C-5, C-141, or C-130 as their Major Weapon System in the grades of Captain thru Lt Colonel with Total Active Federal Commissioned Service (TAFCS) dates between 1970 and 1980.

EXPLANATION OF COLUMN HEADINGS

(YR-GP)

- 1: Pilots in 1970-1973 TAFCS year groups
- 2: Pilots in 1974-1975 TAFCS year groups
- 3: Pilots in 1976-1977 TAFCS year groups
- 4: Pilots in 1978-1980 TAFCS year groups

(PATH)

- 2: Pilots who started their flying in MAC, then went to ATC as an Instructor Pilot and are now back in MAC.

- 5: Those pilots in MAC who have not had an ATC IP tour.

GR: Grade; the 04 and 05 totals include selectees to those grades.  
BPZ: # of pilots with Below the Promotion Zone selections  
DEF: # of pilots currently passed over to the next grade  
2D OER: # with a decontrolled "2" or worse OER  
14XX: # having served as as 14XX (an indication of # with Wing staff tours)  
RTDSUP: # with a Rated supplement tour  
SOA: # with a tour in a Seperate Operating Agency  
MAJCOM: # with a Major Command headquarters level of assignment  
MAC HQ: # with a tour at MAC headquarters  
HAF: # with a Pentagon or Joint Departmental tour  
SOS: # who have completed Squadron Officers School  
ISS: # who have completed an Intermediate Senior Service school course  
MSDEG: # with Masters degree  
PHD: # with a Doctorate degree  
AVGAGE: Average age

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## VITA

Captain Jeffrey A. Porter was born on 18 July 1954 in Pittsburgh, Pennsylvania. He graduated from high school in 1972 and attended Miami University of Ohio from which he received the degree of Bachelor of Arts in Aeronautics and Mathematics. Upon graduation he received a commission in the USAF through the ROTC program. He worked as a Graduate Assistant at Miami University until called to active duty in May 1977. He completed pilot training and received his wings in April 1978. He then served as a T-38 Instructor Pilot in the 97th Flying Training Squadron, Williams AFB, Arizona. Following this assignment in August 1981 he served as a C-141 pilot in the 8th Military Airlift Squadron, McChord AFB, Washington, until entering the School of Systems and Logistics, Air Force Institute of Technology, in May 1985.

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This investigation measured the attitudes and perception that Military Airlift Command (MAC) pilots have towards Air Training Command (ATC) Instructor Pilot assignments. Three pilot groups were examined: those MAC pilots vulnerable for an ATC assignment, those currently serving in ATC and those MAC pilots who have completed an ATC assignment. The perceived effect of an ATC assignment on career potential was measured for these three groups and a comparison was made between groups. A historical data analysis was done to examine career differences between two pilot groups: MAC pilots who have had an ATC assignment and those who have not. The analysis of pilot attitudes and perceptions was accomplished by use of a census survey of MAC pilots. The analysis of career differences was accomplished using historical data provided from the Military Personnel Center (MPC). The results reflect the perception by all three pilot groups that an ATC assignment decreases their chances for promotion and career advancement. For those pilots vulnerable for an ATC assignment and those currently serving in ATC, this attitude is strongly related to their decision to separate from, or remain in, the Air Force. The historical data analysis revealed evidence that those MAC pilots who have had ATC assignments have not done as well in their careers as their contemporaries who remained in MAC.

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